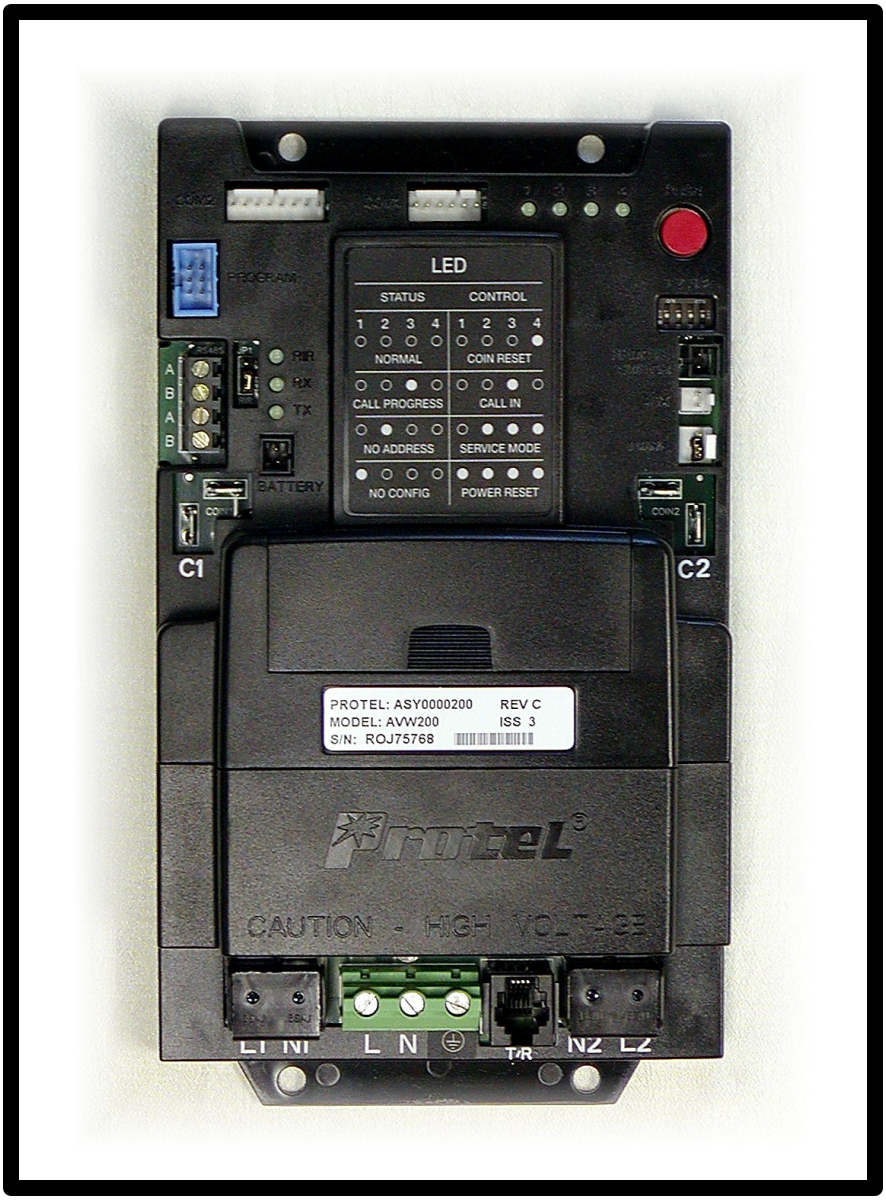


Pro-Star® AVW200 Installation and Operation Manual

Innovation is our business

AVW200HM01.1

AVW200 Installation and Operation Manual Revision History

Revision	Date	Description of Changes
AVW200HM01.0	12/05	Initial Release
AVW200HM01.1	2/16/06	Page 13 – Modified step 4, which referenced mounting template. A mounting template is not available in this revision of the manual. Page 13 – Step 6 – Added “The AC power source should be protected by a 15 amp circuit breaker.” Page 13 – Added text “Caution Risk of explosion exists if battery is replaced by an incorrect type. For disposal of used batteriescall1-800-822-8837” Page 16 – Fuse Replacement Procedure introduction and Step 9 - Modified description of fuse to reflect 2AG, fast acting. Page 16 – Fuse Replacement instructions – Added Step 12. Reference the Installation and Initialization sections of this manual to re-install the Pro-Star® AVW200. Where Applicable – Updated ground symbol to meet UL requirements.

Table of Contents

Chapter 1 - Introduction

Protel is proud to introduce the Pro-Star® AVW200 integrated controller timer and activity monitor for Air, Vacuum and Water machines. The Pro-Star® AVW200 effectively combines the functionality of two timer controlled 110v AC relay switches with the convenience of remote management including programming and status monitoring. The efficiencies gained through remote management of AVW machines result in decreased overhead cost and increased profits. Alarm conditions and coin box information is collected and communicated from the Pro-Star® AVW200 hardware to the IVS™ for AVW Management Software, which can be accessed via the Internet. This innovative system allows for establishing or modifying the timer on duration and vend price remotely, offering added convenience and peace of mind. Featuring a rugged, compact design the Pro-Star® AVW200 is built to provide years of reliable service. Clearly labeled connections and intuitive progression indicators make it easy to install and maintain.

The Pro-Star® AVW200 connects directly to installed coin acceptors and AVW machine motors for providing coin detection and motor on/off control. It then routes connected AC power to the appropriate motor when the programmed base rate is deposited. In addition to turning on the AVW machine, the Pro-Star® AVW200 also monitors and records coin deposits and timer duration. Optional devices provide for the additional monitoring and reporting of air pressure and coin box collections. Following a daily schedule, the Pro-Star® AVW200 uploads its collected data over standard telephone lines or wirelessly, when equipped with the optional cellular interface, to the Internet-based IVS for AVW management software. Through a secure subscription service the IVS for AVW software generates valuable management reports including coin accounting and timer activity as well as equipment status reports such as power failure, low pressure, and stuck timers. Incorporating the Pro-Star® AVW200 into your AVW business brings a new level of management convenience and features that are designed to help optimize operational efficiencies.

Standard Features:

Dual Timer Operation –
One or two motors can be controlled and monitored

Modular Design –
Field replaceable components for cost effective repairs

Cash Box Accounting –
Reports cash box amounts including “box full”

Monitor Battery Backup –
Capable of reporting power outages real time
(Currently not available for Cellular)

Service Mode Event Recording –
Service mode allows for non-intrusive diagnostics

Intuitive Status Indicators –
Provides a visual interpretation of AVW200 status

Proprietary LAN Interconnectivity –
Use a single telephone line for multiple stations

On-board V.22 bis Modem –
No additional equipment needed for remote monitoring

Optional Accessories:

Coin Collection Switch –
Track exactly when the coin box is emptied

Air Pressure Sensor –
Detect low or no air pressure conditions

Cellular Modem Interface –
Wireless option for remote monitoring
(Battery Backup currently not available)

FreeBee Free Vend Remote –
Activate vend cycle from up to 150 feet away

Power-Line A/C Power modem –
Wireless link to on-site telephone line through AC power lines

900MHZ Transmitter / Receiver –
Wireless link to near-by telephone line

Safety

The following general safety precautions must be observed during all phases of operation and service of this instrument. Failure to comply with these precautions or with specific warnings elsewhere violates safety standards of design, manufacture, and intended use of the instrument. Protel Inc.® assumes no responsibility for the customer's failure to comply with these requirements.

IMPORTANT

This instrument is an electrical apparatus and is specifically designed for use or operation only by trained personnel. Only qualified personnel may carry out maintenance.

GROUND THE INSTRUMENT

To minimize shock hazard, the instrument must be connected to an electrical ground. The instrument is equipped with a three-conductor ac power input connector to facilitate a connection to earth ground.

DO NOT OPERATE IN AN EXPLOSIVE ATMOSPHERE

Do not operate the instrument in the direct presence of flammable gases or fumes. Operation of any electrical instrument in such an environment constitutes a definite safety hazard.

KEEP AWAY FROM LIVE CIRCUITS

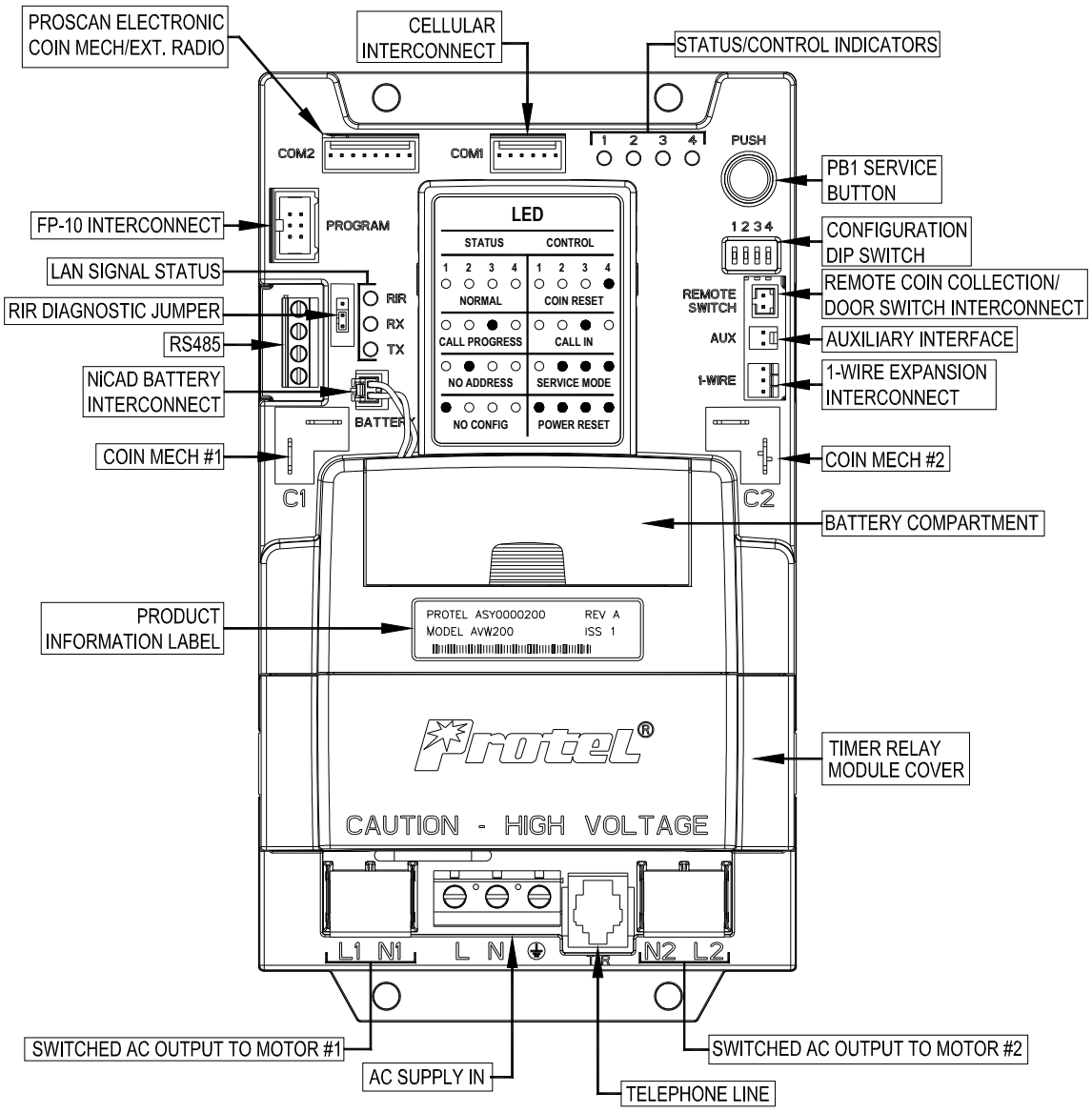
Operating personnel must not remove instrument covers. Qualified maintenance personnel must make component replacement and internal adjustments. Do not replace components with power cable connected. Under certain conditions, dangerous voltages may exist even with the power cable removed.

DO NOT SUBSTITUTE PARTS OR MODIFY INSTRUMENT

Because of the danger of introducing additional hazards, do not install substitute parts or perform any unauthorized modification to the instrument. Return the instrument to Protel Inc.® for service and repair to ensure that safety features are maintained.

Chapter 2 - Connections and Functionality

Before installing the Pro-Star® AVW200 you should become familiar with the location of its components, connectors and indicators.



ProStar® Avw200 Controller / Monitor

Connection Descriptions

L N ⏚	Line (Hot), Neutral, and Ground Input
L1	Controller #1 Switched AC Line Output
N1	Controller #1 AC Neutral Output
L2	Controller #2 Switched AC Line Output
N2	Controller #2 AC Neutral Output
T/R	RJ-11 Modular Telephone Line Tip & Ring Connector
C1	Controller #1 Mechanical Coin Validator Input
C2	Controller #2 Mechanical Coin Validator Input
RS 485	RS485 Wired LAN Interconnect
BATTERY	NiCad Battery Connector
JP1	RIR - Radio in Range - Diagnostic Test Jumper
PROGRAM	FP-10 Flash Programmer Connector
COM 2	Electronic Coin Validator / External Radio Connector
COM 1	Cellular Interface Connector
PUSH (PB1)	Service Push Button
REMOTE SWITCH	Remote Coin Collection or Door Open Switch Connector
AUX	Auxiliary Connector
1-WIRE	1-Wire Connector
DIP SW1	Configuration DIP Switch
Signal LED's	Indicates Signal Transmission Status
Status and Control LED's	Indicates Operational Status and Control Feedback

SW1 Settings

Switch Position	Off (Down)	On (Up)
1	Central Monitor (Normal)	Remote Monitor
2	Hardwire connection (Normal)	Radio Link
3	No prefix dialed	Dials "8" prefix
4	No Prefix dialed	Dials "9" prefix

Note: A POR (Power On Reset) must be initiated after changing the switch positions.

Signal Transmission Status Indicators

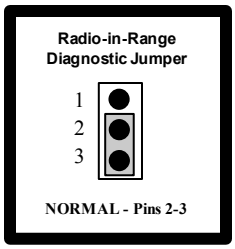
RX	Indicates receive data is detected on the RS485 bus.
TX	Indicates transmitting on the RS485 bus.
RIR	Radio-in-Range Indicator

TX – TX is abbreviated for transmit. This LED will illuminate when that particular monitor is sending data on the RS485 bus.

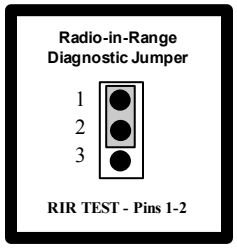
RX – RX is abbreviated for receive. This LED will illuminate when data is detected on the RS485 bus.

RIR – Radio In Range Status Indicator. This LED provides a visual indication of a wireless radio signal and is used for diagnostic purposes. The RIR LED will only light if the RIR Diagnostic Jumper is in the test position. During normal operation, the jumper should be between pins 2 and 3. To perform a Radio-in Range diagnostic test move the jumper between pins 1 and 2.

NOTE:
Failure to return the jumper to the normal position after performing diagnostic tests could lead to premature battery discharge during a power failure.



Set Radio-in-Range Jumper to pins 2 – 3 for normal operation.



Set Radio-in-Range Jumper to pins 1 – 2 to perform RIR diagnostic test.

Operational Status / Control Indicators

LED 1 – Configuration File Status

LED Status	Description
OFF (Normal)	Monitor has a Configuration File and is in a normal operating state.
ON	Monitor does not have a Configuration File.
FLASHING	Monitor failed to download Configuration File and is operating under a default Configuration File.

LED 2 – Address Assignment on Communications Bus (Remote only)

LED Status	Description
OFF (Normal)	Address assigned by Central Controller / Monitor.
ON	Address not assigned by Central Controller / Monitor.

LED 3 – Communication Status

LED Status	Description
OFF (Normal)	No communication activity.
ON w/ PB1	When PB1 is pressed, lights to indicate that the monitor is establishing connection with Host Computer or Central Monitor.
FLASHING	Transferring data to Host Computer.

LED 4 – Coin Box Emptied / Coin Counter Reset

LED Status	Description
OFF (Normal)	No activity.
ON w/ PB1	When PB1 is pressed, lights to indicate coin box collection
ONE FLASH	Monitor is capturing the coin box switch status.
FOUR FLASHES	Coin Collection Completed

LED 2, 3 & 4 – Service / Test Mode

LED Status	Description
OFF (Normal)	Controller is operating in the normal mode.
ON w/PB1	Enter Service Mode
FLASHING	Controller is operating in the Service Mode.

LED 1, 2, 3 & 4 – Soft Reset (Retains data)

LED Status	Description
OFF (Normal)	Controller is operating in the normal mode.
ON w/PB1	Initiates Soft Reset
TWO FLASHES (All LED's)	A Power On Reset (POR) has been successfully performed.

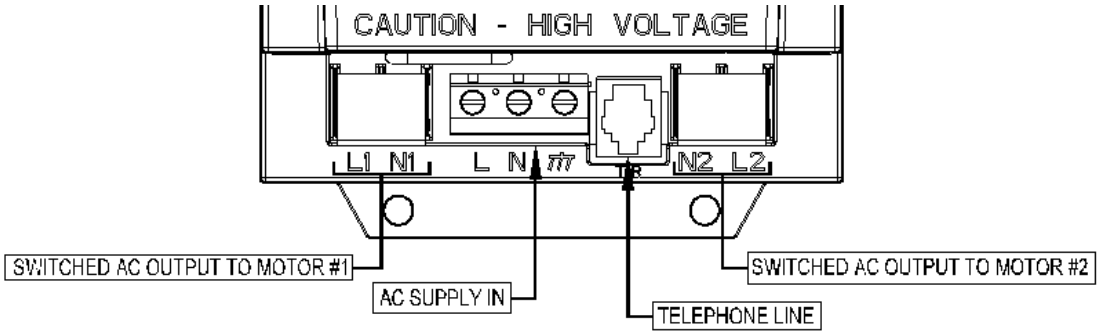
Hard Reset (Data will be lost)

Remove Power – Disconnect the back up battery, wait 3 minutes. Plug backup battery in. All 4 LEDS will flash 2 times. Restore power.

Chapter 3 - Installation

WARNING:
To avoid electrical shock, verify that AC power has been disconnected to the AVW machine before initiating the installation process or when performing maintenance on the Pro-Star® AVW200 or inside the AVW machine.

The Pro-Star® AVW200 is designed for installation inside the AVW machine's controller compartment. Because the space provided for controller mounting varies from one machine manufacturer to another, it may be necessary to identify a suitable location for your specific machine. A template is provided in this manual to assist in establishing the appropriate measurements for mounting the Pro-Star® AVW200. Devices inside of the AVW machine including motors, coin mechanisms and optional sensors or switches as well as external AC power are connected directly to the Pro-Star® AVW200.



Pro-Star® AVW200 Installation

Tools needed:
Screwdriver
Drill

Equipment not supplied:
4ea. – #10 screws
Tie wraps
RJ-11 Modular Telephone Line Connection (non-cellular applications)

Note:
The Pro-Star® AVW200 installation and operation manual does not cover pre-installation set-up of the AVW for IVS management system. Before the Pro-Star® AVW200 can be fully activated it must first be set up in the IVS for AVW management system. This would include site and telephone number assignment, and typically includes setting up base rates, timer durations, event configuration parameters, reporting and/or polling parameters, and notification preferences.

1) **Important:** Turn **OFF** the machine's power.
2) Take a few minutes to familiarize yourself with the system wiring. Use tie wraps to assist in organizing any wires that may hinder the installation process.
3) If optional devices are being used, such as the remote collection switch, the air pressure sensor, and cellular or RF antenna, it is recommended that these devices are installed before installing the Pro-Star® AVW200. Refer to installation instructions specific to these devices.
4) Being careful to avoid damaging wires or the AVW machine integrity, drill the mounting holes.
5) Install the Pro-Star® AVW200 controller timer and monitor securely in place.
6) Attach external AC power to the appropriate Load (L), Neutral (N), and Ground (⏚) terminals. The AC power source should be protected by a 15 amp circuit breaker.
7) Install the Motor #1 wires to the Switched Motor Drive #1 Load (L1) and Neutral (N1) terminals.
8) Install the Motor #2 wires to the Switched Motor Drive #2 Load (L2) and Neutral (N2) terminals. (Dual motor applications only)
9) Install the Mechanical Coin Mechanism #1 wires to connector C1. These connections are not polarity sensitive.
10) Install the Coin Mechanical Mechanism #2 wires to connector C2. These connections are not polarity sensitive.

CAUTION:
Risk of explosion exists if battery is replaced by an incorrect type.
For disposal of used batteriescall1-800-822-8837

11) Attach installed optional devices to their appropriate connectors on the Pro-Star® AVW200.
12) The Pro-Star® AVW200 is shipped with its NiCad battery unplugged. Plug-in the NiCad battery at this time.

13) Install the RJ-11 modular telephone line cord into the connector labeled T/R. (not necessary if using the cellular interface)

14) Important: Re-check all wiring, make sure none of the wiring will cause mechanical interference, and ensure that all modules are securely fastened.

15) Restore AC power to the AVW machine and proceed to the Initialization section of this manual.

Initialization

1) Upon installation, with the NiCad battery plugged in and ac power turned **ON**, LED1 will be illuminated indicating that the Pro-Star® AVW200 monitor is on, but not configured. To configure the monitor, it must communicate with the IVS for AVW Management System.

2) To initiate a call to the host management system, press and hold the red pushbutton depressed until LED3 illuminates. When LED 3 lights, release the red pushbutton.

   Note: Upon pressing the pushbutton, LED4 will briefly illuminate first, then LED3 will light steady while the Pro-Star® AVW200 attempts to establish a connection with the IVS system. When a connection is established, LED3 will begin to flash during modem communication with the host management system. Upon successfully communicating with IVS and receiving a system configuration all LED's will be OFF. The Pro-Star® AVW200 is now ready for normal use.

3) Perform a test vend. Trip a coin mechanism to make the machine turn ON. Then, press and hold the red pushbutton depressed until LED4 illuminates. This will reset the Coin Box amount to zero. Again, LED3 will flash when modem communication with the host has been established, and will turn OFF upon completion. Verify that all LED's are OFF. The test vend event will be displayed on the IVS event screen. This, of course, requires access to the management system.

Communicating with the IVS for AVW Management System

In the event of a communication failure the Pro-Star® AVW200 Controller Timer & Monitor will initiate a retry protocol until a successful communication session occurs. A failed communication session can occur because:

- No line was detected when the Monitor went off-hook to begin the call.
- The line was in use at the time the Monitor went off-hook to place the call.
- The host computer number was busy, or telephone network congestion prevented the host computer from receiving the call.
- The host computer did not answer the incoming call.
- The host computer answered the incoming call, but communication dropped before the session was completed.

All of the events above result in a failed communication session. The Monitor will attempt to establish a new communication session using the following retry protocol:

- The monitor will attempt to call again after 2 minutes. This cycle will be attempted 3 times if needed.
- The monitor will then wait 15 minutes and try again. This cycle will occur 3 times if needed.
- The monitor will wait 2 hours and try again. This cycle will occur 3 times if needed.
- The monitor will try again at the next scheduled reporting time. This will repeat indefinitely until a successful communication occurs.

Line Intrusion Feature

The Pro-Star® AVW200 Monitor will not interfere with other devices on a telephone line. In the event that the Monitor attempts to call the Host Computer while the telephone line is in use with another device, the monitor will go on-hook and initiate the dialing retry routine.

The monitor will disconnect a call in progress with the Host Computer if another device on the telephone line goes off-hook. The dialing retry protocol will take effect at this time and the Monitor will attempt to connect to the Host Computer when the line is available.

Chapter 4 – Optional Equipment

Timer Relay Module

The Pro-Star® AVW200 features a modular Timer Relay assembly. This eliminates the need to replace the entire controller / monitor assembly should a timer relay fail.

Fuse Replacement

If the monitor appears to be non operational (no power, no LED's) check Fuse (F1) under the Timer Relay Module cover. The correct fuse type is 1.5 amps, 250 Volts, 2AG fast acting.

1. **Before proceeding any further, disable AC power to the AVW machine.**

WARNING:
To avoid electrical shock, verify that the AC supply power to the AVW machine has been disconnected at the source before servicing the Pro-Star® AVW200.

2. Remove the external AC power from the Load (L), Neutral (N), and Ground (⏚) terminals.
3. Remove the Motor #1 and Motor #2 wires from the L1, N1, L2 and N2 terminals.
4. Remove the Coin Mechanism #1 and Coin Mechanism #2 wires from connectors C1 and C2 respectively.
5. Remove the RJ-11 modular telephone line cord (if used) from the connector labeled T/R.
6. Remove the Pro-Star® AVW200 from the AVW machine.
7. Gently pull out on the Timer Relay Cover tabs located on each side of the cover and lift to remove the Timer Relay cover.
8. Using a screwdriver, carefully begin to pry up the Timer Relay Module, shifting from side to side until it is raised high enough to gain a grip on both sides with your fingers. Then, lift the Timer Relay Module using a rocking motion until it is free from the Pro-Star® AVW200 unit.
9. Check fuse F1, if the fuse is blown replace with a 1.5 amp, 250 Volt, 2AG, fast acting fuse.
10. Install the Timer Relay Module by aligning it in place on the Pro-Star® AVW200 unit and then firmly pressing it down until it is securely seated.
11. Re-install the Timer Relay Cover.
12. Reference the Installation and Initialization sections of this manual to re-install the Pro-Star® AVW200.

Timer Relay Module Replacement

1. It is recommended that a service call be initiated to the IVS for AVW Management System before performing any maintenance on the Pro-Star® AVW200. To accomplish this, press and hold the red pushbutton depressed until LED3 illuminates. When LED 3 lights, release the red pushbutton.

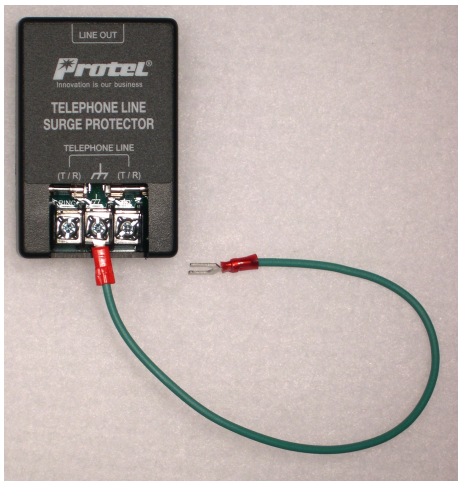
Note: Upon pressing the pushbutton, LED4 will briefly illuminate first, then LED3 will light steady while the Pro-Star® AVW200 attempts to establish a connection with the IVS system. When a connection is established, LED3 will begin to flash. After successfully communicating with IVS all LED's will be OFF.

2. **Before proceeding any further, disable AC power to the AVW machine.**

WARNING:
To avoid electrical shock, verify that the AC supply power to the AVW machine has been disconnected at the source before servicing the Pro-Star® AVW200.

3. Remove the external AC power from the Load (L), Neutral (N), and Ground (⏚) terminals.
4. Remove the Motor #1 and Motor #2 wires from the L1, N1, L2 and N2 terminals.
5. Remove the Coin Mechanism #1 and Coin Mechanism #2 wires from connectors C1 and C2 respectively.
6. Remove the RJ-11 modular telephone line cord (if used) from the connector labeled T/R.
7. Remove the Pro-Star® AVW200 from the AVW machine.
8. Gently pull out on the Timer Relay Cover tabs located on each side of the cover and lift to remove the Timer Relay cover.
9. Using a screwdriver, carefully begin to pry up the Timer Relay Module, shifting from side to side until it is raised high enough to gain a grip on both sides with your fingers. Then, lift the Timer Relay Module using a rocking motion until it is free from the Pro-Star® AVW200 unit.
10. Install the replacement Timer Relay Module by aligning it in place on the Pro-Star® AVW200 unit and then firmly pressing it down until it is securely seated.
11. Re-install the Timer Relay Cover.
12. Reference the Installation and Initialization sections of this manual to re-install the Pro-Star® AVW200.

Telephone Line Surge Protector



The Telephone Line Surge Protector is a fused device that is designed to provide added protection to the Pro-Star® AVW200 against unexpected high voltage surges.

Telephone Line Surge Protector Installation

1. Connect each of the two incoming telephone wires to the terminals labeled T/R.
2. Connect the green ground wire to earth ground.
3. Connect the modular telephone cable between the Telephone Line Surge Protector and the Pro-Star® AVW200.

Remote Coin Box Collection Switch

The PB1 service button on the Pro-Star® AVW200 can be used to report a Coin Collection event to the IVS for AVW system. For added convenience a Remote Coin Box Collection Switch can be installed within the coin box compartment or in an alternate machine location. This will provide collection personnel access to the switch without the need to open the controller compartment. To accomplish this, an open path for routing the switch wiring to the Pro-Star® AVW200 controller / monitor must be available.

Remote Coin Box Collection Switch Installation

1. Identify a convenient location for the remote coin box collection switch that does not physically or electrically interfere with the AVW machine or its components.
2. Clean the established mounting location for the switch with rubbing alcohol to remove any dirt or grime.
3. Attach the switch in place using the supplied Dual Lock fastener.
4. Route the switch wires to the Pro-Star® AVW200 and attach them to the connector labeled Remote Switch.

Air Pressure Sensor

When equipped with the optional Air Pressure Sensor the Pro-Star® AVW200 can monitor and report air pressure status. During an air vend, the air pressure in the hose will fluctuate as the user depresses and releases the air nozzle. The Air Pressure Sensor feeds the status of the air pressure to the Pro-Star® AVW200 throughout the entire vend cycle. The Pro-Star® AVW200 analyzes the fluctuations in airflow to determine whether a normal pressure, low pressure, or no pressure condition exists. A low or no pressure condition will result in a corresponding alarm to the IVS for AVW management system. A low pressure condition may indicate a defective regulator, weak compressor, or an air leak, and a no pressure alarm is likely the result of a cut hose or defective compressor.

Air Pressure Sensor Installation

1. Disconnect the air hose from the pressure regulator (if installed) or compressor output fitting.

When installing the Air Pressure Sensor it is recommended that Teflon Tape be used on all air fittings.

2. Connect the Pressure Sensor to the pressure regulator using the T fitting. The arrow on the pressure regulator indicates air flow direction and should be pointed towards the air hose.
3. Connect the air hose to the Pressure Sensor.
4. Route the Pressure Sensor wire to the Pro-Star® AVW200 and secure it to the connector labeled 1-WIRE.
5. Use tie wraps to neatly secure the Pressure Sensor wire in place so that it will not interfere with the operation of the AVW machine or become damaged.

Cellular Interface Module and Antenna

In situations where the location of the AVW machine does not provide for convenient access to a telephone line the optional Cellular Interface Module can be installed. This provides a wireless solution for communications between the Pro-Star® AVW200 Controller / Monitor and the IVS for AVW management system.

Cellular Interface Module Installation

NOTE: A 7/16" hole must be drilled in the top of the cabinet to allow installation of the antenna.

1. Identify a suitable location for mounting the Cellular Interface Module within the AVW machine. When considering the mounting location keep in mind that a channel for routing the Cellular Antenna wire, AC power, and Pro-Star® AVW200 interface cable must be available.
2. Clean the established Cellular Interface Module mounting location with rubbing alcohol to remove any dirt or grime.
3. Secure the Cellular Interface Module in place using the supplied Dual Lock fasteners.

4. Mount the antenna through the hole drilled in the top of the cabinet. Connect the antenna cable (silver colored end) to the base of the antenna; secure the antenna base with locking nut.
5. Attach the Cellular Antenna wire (if installed), Pro-Star® AVW200 interface cable and AC power wire to the Cellular Interface Module.
6. Route the Pro-Star® AVW200 interface cable to the Pro-Star® AVW200 Controller / Monitor and secure it to the connector labeled COM1.
7. Connect the AC power plug into an AC receptacle located within the AVW machine.
8. Reference the Initialization procedure to configure the Pro-Star® AVW200 Controller / Monitor and establish communications with the IVS for AVW Management Software.

FreeBee Remote Kit with External Antenna

Freebee installation

NOTE: A 7/16” hole must be drilled in the top of the cabinet to allow installation of the antenna.

1. Remove the cover marked LED Status Control by pressing in the sides and gently lift near the top center of the cover. This allows access to the radio.

2. Install the cable with the brass colored end by holding the radio board vertically, carefully press down on the miniature connector until you feel a click. Remount the radio if necessary and place the cover back on. Notice the guide holes for the antenna cable when replacing the cover. The cable can exit on the right or the left side under the cover.

3. Mount the antenna through the hole drilled in the top of the cabinet. Connect the antenna cable (silver colored end) to the base of the antenna; secure the antenna base with the locking nut.

4. Mount the monitor and connect the two cables together.

In the Routes/Sites/Machine Information menu, select Integrated Monitor and input the serial number of the Freebee. The serial number is located on the back of the Freebee.

In the Event Configuration menu for the Routes/Sites/Machine, you will set the Cost and Duration for both vends.

Chapter 5 – Operational Features

Service Mode

A Service mode allows for performing test vends without affecting coin collection totals. To enter the Service Mode press and hold the red service button on the Pro-Star monitor until LED's 2, 3, & 4 are lit, and then release the button, approximately 3 seconds. The monitor will remain in the Service Mode for a period of fifteen (15) minutes, and LED's 2, 3, and 4 will blink continuously while the monitor is in the Service Mode. Test coin drops and timer events are reported to the IVS management software as Test Coin Drop, Test Vend (Timer #1 OFF), and Test Vend (Timer #2 OFF). Additionally, the monitor will report the date and time that the service mode was accessed.

To exit the Service Mode manually, simply press the red service button. In the normal operation mode all LED's are off.

Note: Service Mode events can be set up to be emailed or text-messaged via the Notification section in the IVS for AVW management system. This allows field service personnel to verify operation when servicing a machine without requiring someone to be at the host computer to provide feedback.

Coin Collections

Coin collections can be recorded by the Pro-Star® AVW200 Controller /Monitor and reported to the IVS for AVW management software. When a coin collection is initiated, the amount in box is re-set to $0.00. A coin collection can be initiated using either the PB1 pushbutton or the optional remote coin box collection switch.

Note: It is necessary to program the remote switch to work as a coin collection switch rather than a door open switch. This is accomplished through the IVS for AVW management software Event Configuration.

To initiate a coin box collection, simply press and release PB1 or the optional coin box switch.

Power On Reset (POR)

Should the Pro-Star® AVW200 Controller / Monitor ever get into an unknown state, it may be necessary to perform a Power On Reset (POR). When a POR is performed, all existing information and programming in the Pro-Star® AVW200 Controller /Monitor will be lost. Therefore, a POR is recommended as a "last resort" after all other attempts to return the unit to its normal operating state has failed. To initiate a POR, press and hold the red PB1 pushbutton until all four status / control indicators are lit.